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ABSTRACT

Trends in college attendance of black and white high school graduates were examined, with a focus on whether black and white students of similar academic achievement and economic levels attend colleges at similar rates. Data were obtained from the Current Population Survey, the Higher Education General Information Survey, and the High School and Beyond Study (HS&B). The racial or ethnic distribution of persons who have completed college is examined, along with enrollment patterns of persons over age 24. Key findings include: the number and proportion of black 18- to 24-year olds who attended college increased substantially between 1970 and 1985; within the same academic achievement groups, black high school graduates attend college in proportions equal to or greater than the proportions of whites who attend; within the same income groups, black high school graduates attend college in proportions equal to or greater than the proportions of whites who attend; and data from the National Assessment of Educational Progress indicate that substantially fewer black than white 11th graders read at the level expected of college freshmen. A five page reference list and numerous tables are provided. (SW)

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College Enrollment Patterns of Black and White Students

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Summary of Report

This report examines recent trends in the enrollment of black and white high school graduates in college. Data from the Census Bureau's Current Population Survey, the Higher Education General Information Survey (HEGIS), and from the Department of Education's longitudinal survey, High School and Beyond (HS&B), are examined for patterns in black enrollment in college since 1970. A special concern was whether black and white students of similar academic achievement and economic levels attend college at similar rates.

The key findings are as follows:

- The number and proportion of black 18- to 24-year-olds who attended college increased substantially between 1970 and 1985. The percentage of black 18- to 24-year-olds attending college increased (from 15.5 percent in 1970 to 22.6 percent in 1976), declined slightly between 1976 and 1980 (from 22.6 to 19.2 percent in 1980), and increased slightly or remained stable since 1980 (reaching 19.8 percent in 1985).

- The portion of black 25- to 29-year-olds completing four years of college increased in the early 1970's, declined between 1976 and 1980 and increased to a record high 14.6 percent in 1984.

- Among all black individuals in the traditional and nontraditional age groups taken together, there has been a slight decline in the number enrolled since 1980, although enrollment in 1984 is higher than it was in 1976. According to HEGIS data, 1,033,000 blacks were enrolled in 1976, 1,107,000 in 1980, and 1,070,000 in 1984.

- Within the same academic achievement groups, black high school graduates attend college in proportions equal to or greater than the proportions of whites who attend, according to HS&B data. For both blacks and whites, the proportion entering college increases with rising achievement levels.

- Within the same income groups, black high school graduates attend college in proportions equal to or greater than the proportions of whites who attend, according to HS&B data. For both blacks and whites,

the proportion entering college increases as family income increases.

- Based on data from the National Assessment of Educational Progress (NAEP), substantially fewer black than white 11th graders read at the level expected of college freshmen. Nationwide, 19 percent of black 11th graders read at the "adept" level compared with 47 percent of whites.

- The gap in black and white achievement found in NAEP data, in conjunction with HS&B data showing similar black and white enrollment by achievement level, suggest that blacks' enrollment in college would increase dramatically if blacks' academic achievement in elementary and secondary grades increased to a level comparable with the achievement of whites.

COLLEGE ENROLLMENT PATTERNS OF BLACK AND WHITE STUDENTS

Several recent reports suggest that black enrollment in institutions of higher education has declined since 1980.[1] This paper was commissioned to conduct a more in-depth analysis of black enrollment patterns. It goes beyond these recent reports in three ways: it focuses on the traditional college-age group of young people ages 18 through 24; it focuses on data from the U.S. Bureau of the Census' Current Population Surveys in addition to data from the Higher Education General Information Survey; and it examines major correlates known to affect college going behavior--most notably academic achievement.

The evidence reviewed appears to show three distinct stages of traditional college-age black enrollment: rapid growth from 1970 to about 1976; slight decline from 1976 to 1980; and a period of slight recovery or relative stability from 1980 through 1985. The most recent trends, we find, do not indicate retreat from the strong advances in black college enrollment achieved over the entire 15-year period.

To understand the differences in black and white enrollment, however, it is important to look beyond the observed enrollment figures. The evidence indicates that (1) many factors influence both black and white enrollment in institutions of higher education; and (2) most of these factors, such as academic achievement in elementary and

secondary schools and family income, are largely beyond the control of the colleges.[2]

An implication of this second finding is that future gains in black enrollment in college will probably depend on improvements in academic achievement by blacks at the elementary and secondary levels of education. Our data show that although the overall percentage of black high school graduates attending college is lower than the overall percentage of white graduates, within similar achievement groups the percentages of recent black high school graduates attending college are greater than or about the same as the percentages for white students. A primary reason that relatively fewer blacks enroll in college is that relatively fewer lower achieving students in high school go on to college, and black high school students have, on average, lower achievement than white students. In addition, for two of the three family income groups derived from our survey data, the percentage of high school graduates enrolled in college is higher for blacks than for whites. We provide details on these findings later in this report.

In this report we first use trend data to compare the college enrollment patterns for white and black students of traditional college age. We focus primarily on persons 18 to 24 years old because this group is most affected by changes in current institutional and other education policies. The enrollment decisions of older, nontraditional students may be

influenced by a variety of other family, economic, and social factors. We analyze enrollment trends from 1970 to 1985 but do not directly examine such issues as black persistence or performance in college, black participation in graduate study, or the quality of the schools attended by black students. Nor do we analyze changes in factors that might influence these trends, such as changes in the economy, the availability of financial aid, the costs of attending college, or trends in attitudes toward education. These are beyond the scope of this paper. Then, we analyze the detailed data for the more recent years with respect to two factors known to affect decisions about college enrollment: academic achievement and family income.

Recent Trends in Enrollment

There are a number of ways to view enrollment patterns.[3] Perhaps the most fundamental is to examine the change in the number of students enrolled over time. Because the number of students in college depends on both the size of the eligible population and the enrollment rate, one can study the proportion of the population within each racial or ethnic category attending college. A narrower approach is to look at the proportion of high school graduates attending college.

Traditional College Age Enrollment

Data derived from the Census Department's Current Population Survey (CPS) (Table 1) show that between 1970 and 1985 the number of black students of traditional college age

Table 1. Number of Black and White 18 to 24 Year Olds Enrolled in College, Selected Years, October 1970 to 1985

(In Thousands)

Number of 18-24 Year Olds Enrolled in College	1970	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985
Total	5805	6935	7181	7142	6995	6991	7400	7575	7678	7477	7591	7537
White	5305	6116	6276	6209	6077	6120	6423	6549	6694	6463	6526	6500
Black	416	665	749	721	694	696	715	750	767	741	786	734

Source: U.S. Bureau of the Census, School Enrollment-Social and Economic Characteristics of Students: October 1984 (Advance Report), Current Population Reports (CPS), Series P-20, No. 404, Table B, (Washington, D.C.: U.S. Government Printing Office (GPO), 1985, and idem, School Enrollment-Social and Economic Characteristics of Students: October 1985 (Advance Report), CPS, Series P-20, No. 409, (Washington, D.C.: U.S. GPO, 1985.)

enrolled in college increased by a total of more than 75 percent--up from 416,000 in 1970 to 734,000 in 1985.[4] The most rapid growth in enrollment occurred in the first of the three periods. In contrast, the total number of white students enrolled grew about 20 percent over the 1970-85 period; as was the case with the figures for black enrollment, most of the growth for white enrollment occurred in the early 1970's.

Enrollment as a Percentage of the Population

The number of black students enrolled is obviously a function of the total black population ages 18 to 24 and the number of black high school graduates. Table 2 shows that the proportion of black 18- to 24-year-olds enrolled in college increased about 45 percent between 1970 and 1976. The share of the population enrolled fell from 22.6 percent in 1975 to 19.2 percent in 1980 and then fluctuated by less than one percentage point through 1985, when it was 19.8 percent.

Enrollment as a Percentage of High School Graduates

The increase in black enrollment has kept pace with the rapid rise in the proportion of black students graduating from high school, so that the percentage of black high school graduates who attend college in 1985 is virtually the same as it was in 1970. However, it should again be noted that for this measure as for the others, there are three distinct trends, as shown in Table 2: rapid growth in the proportion of black high school graduates attending college from 1970 to 1976 (26.0 to 33.5 percent), a decline from 1976 to 1980 (33.5 to

Table 2. High School Graduation and College Enrollment for Black and White 18- to 24-year-olds, as a percentage of All 18- to 24-year olds, Selected Years, 1970-85.

	1970	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985
Percentage of All 18-to 24-Year Olds Enrolled in College												
Total	25.7	26.3	26.7	26.1	25.3	25.0	25.6	26.2	26.6	26.2	27.1	27.8
White	27.1	26.9	27.1	26.5	25.7	25.6	26.2	26.7	27.7	27.0	28.0	28.7
Black	15.5	20.7	22.6	21.3	20.1	19.8	19.2	19.9	19.8	19.2	20.4	19.8
Percentage of All 18-to 24-Year Old High School Graduates Enrolled in College												
Total	32.7	32.5	33.1	32.5	31.4	31.2	31.6	32.5	33.0	32.5	33.2	33.7
White	33.2	32.4	33.0	32.2	31.1	31.2	31.8	32.5	33.6	32.9	33.7	34.4
Black	26.0	32.0	33.5	31.5	29.7	29.5	27.6	28.0	28.0	27.0	27.2	26.1
Percentage of All 18-to 24-Year Old High School Graduates												
Total	78.8	80.8	80.5	80.5	80.7	80.1	80.9	80.6	80.7	80.4	81.6	82.4
White	81.4	83.2	82.4	82.3	82.6	82.1	82.6	82.2	82.4	82.2	83.0	83.6
Black	59.5	64.8	67.5	67.5	67.8	67.1	69.7	70.9	70.9	70.9	74.7	75.6

Source: U.S. Bureau of the Census, School Enrollment-Social and Economic Characteristics of Students: October 1984 (Advance Report), Current Population Reports (CPS), Series P-20, No. 404, Table B, (Washington, D.C.: U.S. Government Printing Office (GPO), 1985, and idem, School Enrollment-Social and Economic Characteristics of Students: October 1985 (Advance Report), CPS, Series P-20, No. 409 (Washington, D.C.: U.S. GPO, 1985).

27.6 percent), and relative stability (a slight decline) from 1980 to 1985 (27.6 to 26.1 percent). The percentage of all 18- to 24-year-old white high school graduates attending college has risen slightly more than the percentage for black students over the total period, a result that may be related to the slow relative growth in the proportion of white high school graduates.

The relative stability in the share of black high school graduates attending college between 1980 and 1985 contrasts with the rapid rise in the proportion of black 18- to 24-year-olds who graduated from high school (from 69.7 percent in 1980 to 75.6 percent in 1985). The proportion of white 18- to 24-year-olds who graduated from high school has changed little since 1970 (81.4 percent in 1970, 82.6 percent in 1980, and 83.6 percent in 1985).

Black Enrollment Share

The CPS also reports shares of total college enrollment for each racial or ethnic group of 18- to 24-year-olds. The ratio of black-to-white enrollment rose from 7.8 percent in 1970 to 11.9 percent in 1976, then declined to 11.1 percent in 1980 and thereafter remained relatively constant (11.3 percent in 1985) as shown in Table 3. Similarly, 91.4 percent of 18- to 24-year old college students were white in 1970 and 7.2 percent were black; in 1985, these percentages were 86.2 and 9.7 percent, respectively.

Table 3. Ratios of College Enrollment for Black and White 18- to 24-Year-Olds, Selected Years, October of 1970 to 1985.

	1970	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985
Percentage of Total Enrollment in Group												
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
White	91.4	88.2	87.4	86.9	86.9	87.5	86.8	86.5	87.2	86.4	86.0	86.2
Black	7.2	9.6	10.4	10.1	9.9	10.0	9.7	9.9	10.0	9.9	10.4	9.7
Ratio of Black Enrollment to White Enrollment	7.8	10.9	11.9	11.6	11.4	11.4	11.1	11.5	11.5	11.5	12.0	11.3

Source: U.S. Bureau of the Census, School Enrollment-Social and Economic Characteristics of Students: October 1984 (Advance Report), Current Population Reports (CPS), Series P-20, No. 404, Table B, (Washington, D.C.: U.S. Government Printing Office (GPO), 1985, and idem, School Enrollment-Social and Economic Characteristics of Students: October 1985 (Advance Report), CPS, Series P-20, No. 409 (Washington, D.C.: U.S. GPO, 1985).

Note: Columns do not add to 100 percent because college students of other races are omitted from table.

College Graduates

Another way of assessing changes in higher education participation and equity is to look at the racial or ethnic distribution of persons who have completed college, rather than at the distribution of those who are currently attending. Because the length of time that different segments of the population take to complete their education may vary with economic or social pressures--and the timing of college attendance may be affected by factors such as employment opportunities in the labor market--analysis that is limited to 18- to 24-year-olds currently enrolled may understate the ultimate relative educational attainment between blacks and whites.

Trends in the percentage of 25- to 29-year-old persons who have graduated from college appear to be similar to trends in enrollment rates and reflect the same three stages of growth, decline, and recovery (Table 4). The percentage of black college graduates between the ages of 25 and 29 jumped from 7.3 percent in 1970 to 13.0 percent in 1976, but declined to 11.7 percent in 1980. Indeed, this indicator of the ultimate educational attainment of black students not only recovered between 1980 and 1984 (the last year for which data are available) but reached a new peak in 1984 at 14.6 percent.

Table 4. Percentage of Blacks and Whites Aged 25+ and Ages 25 to 29 Who Have Completed Four Years of College or More, Selected Years, 1970-84

	1970	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984
Age 25+											
Total, All Races	11.4	13.9	14.7	15.4	15.7	16.4	17.0	17.1	NA	18.8	19.1
White	11.6	14.5	15.4	16.1	16.4	17.2	17.8	17.8	NA	19.5	19.8
Black	4.5	6.4	6.6	7.2	7.2	7.9	7.9	8.2	NA	9.5	10.4
Ages 25 to 29											
Total, All Races	16.4	21.9	23.7	24.0	23.3	23.1	22.5	21.3	NA	22.5	21.9
White	17.3	22.8	24.6	25.3	24.5	24.3	23.7	22.4	NA	23.4	23.1
Black	7.3	10.7	13.0	12.6	11.8	12.4	11.7	11.6	NA	12.9	14.6

Source: U.S. Bureau of the Census, Education in the United States, 1940-1983, (1985), Table A-2.

Note: Figures for 1980 and after are tied to 1980 census base; those for 1979 and before are tied to to 1970 census base.
NA = Not available.

Total Enrollment Patterns Including Nontraditional Students

As already mentioned, the enrollment of older, nontraditional students is affected by many factors. Because the percentage of persons over the age of 24 attending college is increasing, an analysis that is limited to the enrollment figures for 18- to 24-year-olds misses some of the important trends in college enrollment. Table 5 shows the enrollment patterns for all students, both traditional and nontraditional.

Because enrollment trends for racial/ethnic groups by type of institution are not readily available from the CPS data, these figures are compiled from the Department of Education's Higher Education General Information Survey (HEGIS), which provides a count of total higher education enrollment, including older, nontraditional students, disaggregated by race or ethnicity and type of institution. (Students enrolled in non-collegiate postsecondary institutions are excluded from HEGIS). HEGIS collects information on race and ethnicity every two years, and these data are readily available since 1976.

HEGIS data show that between 1976 and 1980 the total number of black students increased in both public and private higher education institutions and in two-year and four-year institutions; after 1980 the numbers declined in all institutions. The decline in enrollment since 1980 has been greater in public than in private institutions, despite the higher direct costs of attending private institutions.

Table 5. Traditional and Nontraditional College Enrollment of Black and White Students, by Type of Institution, Fall, Selected Years, 1976-84

(In Thousands)

	1976	1978	1980	1982	1984
All Institutions					
Total, All Races	10,986	11,231	12,087	12,388	12,162
White	9,076	9,194	9,833	9,997	9,767
Black	1,033	1,054	1,107	1,101	1,070
Four-Year Institutions					
Total, All Races	7,107	7,203	7,565	7,648	7,651
White	5,999	6,027	6,275	6,306	6,263
Black	604	612	634	612	613
Two-Year Institutions					
Total, All Races	3,879	4,028	4,521	4,740	4,511
White	3,077	3,167	3,558	3,692	3,504
Black	429	443	472	489	457
Public Institutions					
Total, All Races	8,641	8,770	9,456	9,695	9,425
White	7,095	7,136	7,656	7,785	7,525
Black	831	840	876	873	841
Private Institutions					
Total, All Races	2,345	2,461	2,630	2,693	2,737
White	1,982	2,058	2,177	2,212	2,242
Black	201	215	231	228	229

Source: W. Vance Grant and Thomas D. Snyder, Digest of Education Statistics, various years; 1984 preliminary, unpublished data.

Note: Enrollment by race/ethnicity is reported on HEGIS surveys only in even numbered years. These figures may differ from enrollment data reported on the CPS because CPS data are based on surveys whereas HEGIS data represent universe counts. HEGIS data prior to 1976 are not readily available.

Summary of the Three Periods

The data cited here have generally shown three distinct trends in college attendance by traditional college-age blacks: a strong expansion lasting roughly from 1970 through 1976; a period of decline from 1976 through 1980; and a period of slight recovery or stability since 1980. These stages are evident in the number of traditional college-age students enrolled; in the shares of the population and of high school graduates attending college; in the relative representation of blacks and whites attending college; and in the proportion of young college graduates relative to the population. For traditional and nontraditional students together, there has been a slight decline in total enrollment since 1980, although the number enrolled in 1984 is greater than in 1976.

THE EFFECTS OF STUDENT ACADEMIC ACHIEVEMENT AND FAMILY INCOME

The trends that have just been noted present a picture of black and white enrollment patterns over time using aggregate national data. In this section, we present more detailed information about the college enrollment behavior of black and white students and the degree to which enrollment patterns are affected by students' academic achievement and their families' income levels. Data are also presented across regions of the country.

The research literature shows that college enrollment is influenced by a variety of educational and family background

factors. Almost all studies examining the demand for higher education have indicated that family economic status, student academic achievement, and other variables are important determinants in students' decisions to enroll and to persist in college. The importance of each factor may differ across studies depending on the researchers' methodology, but the consensus in the literature supports cause-and-effect relationships between a clearly defined set of such factors and college enrollment decisions.[5]

We focus on academic achievement because it is one factor that the educational system and policymakers might be able to influence to increase black and white college enrollment. We include family income because it is an economic indicator that is readily available from our data source. By focusing on these two indicators, however, we do not mean to imply that other factors--such as differences between black and white students in their attitudes toward education, family values, the distribution of financial aid, or the direct or indirect costs of attending college--are unimportant.

We have derived our information from the Department of Education's longitudinal High School and Beyond (HS&B) survey and from available state-specific information.

Data from the Longitudinal High School and Beyond Survey

We tabulated black-white enrollment patterns from the 1980 senior cohort of the HS&B survey (and the follow-ups to the

base-year survey), disaggregated by academic achievement, family income, and region of the country.[6] These tabulations permit certain conclusions to be drawn concerning black-white enrollment trends, while holding achievement, income, and regional factors constant.

The HS&B survey offers only a few measures of achievement and income by which to analyze enrollment patterns. The achievement measure we use is the average reading score index which measures students' skill in analysis, interpretation, and comprehension. On the basis of the national samples, students' reading achievement is divided into three levels and the groups are categorized as lower, middle, and higher. (See Table A-3 in the appendix for more detail on these reading scores.) We used the 1980 measure of family income provided in the survey, also broken into roughly three equal groups denoted as lower (less than $12,000), middle ($12,000 to $19,999), and higher ($20,000 and above).

The data presented in these tables are nationally representative (i.e., weighted in order to ensure that the proportions shown are those that occur in the population as a whole). Within the range of data derived from the HS&B sample, we found consistent patterns, but because the sample size for some of the HS&B tabulations is small, certain observations may not provide statistically significant indicators.[7]

We derived estimates for the percentage of all 1980 high school graduates who have ever entered college in the four

years after high school graduation for the nation and by region. (These data are presented in Appendix Tables A-1 and A-2 where they are also disaggregated by public or private control and by two- and four-year attendance.)[8] Nationwide, approximately 53 percent of all recent black high school graduates entered college at some time over the four-year period since high school graduation, compared with 58 percent of white graduates--for a black-to-white enrollment ratio of 0.91 (Table 6).

As research has shown, college enrollment is closely related to academic achievement. On average, black students have lower achievement levels than white students, and this difference can be expected to be reflected in college enrollment figures. But, by dividing achievement levels in 1980 into roughly three equal groups, we can examine the influence of achievement on college enrollment for blacks and whites within similar academic achievement groups. As achievement increases from the lowest to the highest group, Table 6 shows that the percentage of persons ever attending college increases for blacks and whites.

Within each of these three achievement groups, the ratio of black-to-white high school graduates enrolled in college is above 1.0, meaning that for each group, the proportion of black high school graduates who enrolled in college during the four-year period after high school graduation is greater than the

Table 6. Percentage of Black and White 1980 High School Graduates Who Had Entered College After High School Graduation, By Achievement Group, National Summary

	Lowest Third	Black-to-White Ratio	Middle Third	Black-to-White Ratio	Highest Third	Black-to-White Ratio	All Achievement Groups	Black-to-White Ratio
Total	33.67	NA	55.73	NA	72.81	NA	56.30	NA
White	32.29	NA	54.45	NA	73.13	NA	57.73	NA
Black	40.25	1.25	63.86	1.17	74.44	1.02	52.76	0.91

Source: U.S. Department of Education, Center for Education Statistics, High School and Beyond, unpublished tabulations from 1980 senior cohort.

Notes: Some sample sizes used for these calculations may be insufficient for meaningful comparisons on percentages shown. Tests of significance have not been performed.
Totals on each table may differ from those on other tables as the result of slight differences in the treatment of missing data.

proportion of white high school graduates who enrolled. For example, although the total black-to-white enrollment ratio (the percentage of all black high school graduates enrolled in college compared with white high school graduates enrolled) is 0.91, the college enrollment ratio for lower achieving blacks relative to lower achieving whites is 1.25. The ratios for students in the middle and highest achieving groups are 1.17 and 1.02. Hence when comparisons are made within similar achievement groups, a greater proportion of black high school graduates than white graduates attend college.

The patterns are similar for enrollment by income groups (see Table 7). As family income increases, a greater proportion of black high school graduates in the lower and middle income groups attend college than the proportions for whites in those groups. Again, however, because the percentage of students going to college is lower for the lower income groups and because many more black students are in the lower income groups, the national black-to-white ratio is under 1.0.

Table 7 also shows the percentage of recent high school graduates who attend college nationwide within each combined academic achievement and income group. For all such combinations of achievement and family income except one, black students attend college in greater proportions than white students. The sole exception is the 0.97 ratio seen for the highest achieving/highest family income group, indicating that

Table 7. Percentage of Black and White 1980 High School Graduates Who Had Entered a Postsecondary Institution After High School Graduation, By Achievement Levels and 1980 Family Income Groups, for the Nation and Four Regions

Achievement Percentile As Measured by Reading Scores	Lowest Third	Black-to-White Ratio	Middle Third	Black-to-White Ratio	Highest Third	Black-to-White Ratio	All Income Groups	Black-to-White Ratio
All Students	42.86	NA	46.08	NA	68.69	NA	56.30	NA
Lowest Third	27.12	NA	26.84	NA	45.05	NA	33.67	NA
Middle Third	42.90	NA	46.51	NA	68.26	NA	55.73	NA
Highest Third	63.96	NA	63.25	NA	79.97	NA	72.81	NA
White (Total)	43.79	NA	46.01	NA	69.26	NA	57.73	NA
Lowest Third	21.02	NA	23.59	NA	43.99	NA	32.29	NA
Middle Third	41.15	NA	43.09	NA	67.40	NA	54.45	NA
Highest Third	62.38	NA	63.46	NA	80.38	NA	73.13	NA
Black (Total)	44.95	1.03	51.55	1.12	66.97	0.97	52.76	0.91
Lowest Third	33.74	1.61	40.70	1.73	53.35	1.21	40.25	1.25
Middle Third	52.30	1.27	64.27	1.49	78.54	1.17	63.86	1.17
Highest Third	74.98	1.20	69.14	1.09	78.11	0.97	74.44	1.02
NORTHEAST								
All Students	48.21	NA	44.97	NA	72.28	NA	59.27	NA
Lowest Third	20.86	NA	23.96	NA	39.26	NA	30.90	NA
Middle Third	34.99	NA	42.44	NA	73.33	NA	53.98	NA
Highest Third	81.35	NA	63.25	NA	83.17	NA	77.19	NA
White (Total)	48.56	NA	44.98	NA	72.91	NA	60.32	NA
Lowest Third	24.62	NA	21.32	NA	38.28	NA	29.29	NA
Middle Third	29.48	NA	39.00	NA	72.11	NA	51.51	NA
Highest Third	84.26	NA	64.40	NA	83.41	NA	77.98	NA
Black (Total)	48.22	0.99	56.58	1.26	77.37	1.06	60.91	1.01
Lowest Third	31.04	1.26	45.11	2.12	62.79	1.64	45.23	1.54
Middle Third	54.11	1.84	80.01	2.05	83.96	1.16	72.75	1.41
Highest Third	92.44	1.10	56.52	0.88	89.17	1.07	79.57	1.02

(Continued)

Table 7. (Continued)

Percentage of Black and White 1980 High School Graduates Who Had Entered a Postsecondary Institution After High School Graduation, By Achievement Levels and 1980 Family Income Groups, for the Nation and Four Regions

Achievement Percentile As Measured by Reading Scores	Lowest Third	Black-to-White Ratio	Middle Third	Black-to-White Ratio	Highest Third	Black-to-White Ratio	All Income Groups	Black-to-White Ratio
SOUTH								
All Students	39.13	NA	46.17	NA	64.22	NA	51.90	NA
Lowest Third	26.73	NA	30.52	NA	46.50	NA	34.50	NA
Middle Third	40.37	NA	51.14	NA	64.12	NA	54.27	NA
Highest Third	60.53	NA	62.79	NA	76.91	NA	69.53	NA
White (Total)	40.94	NA	47.48	NA	65.21	NA	55.02	NA
Lowest Third	19.15	NA	28.93	NA	47.46	NA	35.37	NA
Middle Third	40.34	NA	49.35	NA	62.85	NA	54.36	NA
Highest Third	58.41	NA	62.50	NA	77.52	NA	69.76	NA
Black (Total)	41.67	1.02	50.64	1.07	58.07	0.89	47.94	0.87
Lowest Third	32.84	1.71	39.90	1.38	43.13	0.91	36.91	1.04
Middle Third	48.81	1.21	58.81	1.19	74.08	1.18	57.59	1.06
Highest Third	69.25	1.19	76.56	1.22	72.06	0.93	72.38	1.04
CENTRAL								
All Students	47.29	NA	44.22	NA	68.76	NA	57.20	NA
Lowest Third	23.99	NA	17.19	NA	42.67	NA	28.80	NA
Middle Third	55.00	NA	39.99	NA	66.95	NA	55.78	NA
Highest Third	66.25	NA	63.15	NA	79.50	NA	72.59	NA
White (Total)	48.19	NA	44.90	NA	69.98	NA	58.42	NA
Lowest Third	23.75	NA	15.90	NA	44.08	NA	29.15	NA
Middle Third	56.28	NA	37.78	NA	67.09	NA	55.41	NA
Highest Third	64.63	NA	63.84	NA	80.16	NA	73.07	NA
Black (Total)	58.02	1.20	47.64	1.06	64.53	0.92	56.39	0.97
Lowest Third	33.27	1.40	32.11	2.02	51.33	1.16	37.99	1.30
Middle Third	76.99	1.37	65.28	1.73	76.81	1.14	71.55	1.29
Highest Third	86.17	1.33	61.01	0.96	69.43	0.87	73.95	1.01

(Continued)

Table 7. (Continued)

Percentage of Black and White 1980 High School Graduates Who Had Entered a Postsecondary Institution After High School Graduation, By Achievement Levels and 1980 Family Income Groups, for the Nation and Four Regions

Achievement Percentile As Measured by Reading Scores	Lowest Third	Black-to-White Ratio	Middle Third	Black-to-White Ratio	Highest Third	Black-to-White Ratio	All Income Groups	Black-to-White Ratio
WEST								
All Students	39.96	NA	50.67	NA	70.21	NA	58.56	NA
Lowest Third	32.03	NA	34.63	NA	51.99	NA	41.42	NA
Middle Third	45.43	NA	54.87	NA	71.66	NA	60.09	NA
Highest Third	41.49	NA	64.32	NA	79.41	NA	70.95	NA
White (Total)	33.25	NA	47.56	NA	68.12	NA	56.65	NA
Lowest Third	9.32	NA	29.10	NA	44.62	NA	35.55	NA
Middle Third	40.16	NA	49.63	NA	69.40	NA	56.56	NA
Highest Third	33.68	NA	62.16	NA	78.89	NA	69.36	NA
Black (Total)	55.42	1.67	52.85	1.11	88.24	1.30	65.36	1.15
Lowest Third	60.94	6.54	49.80	1.71	88.52	1.94	63.07	1.77
Middle Third	45.16	1.12	61.52	1.24	86.24	1.24	67.32	1.19
Highest Third	49.72	1.48	60.48	0.97	97.00	1.23	73.58	1.06

Source: U.S. Department of Education, Center for Education Statistics, High School and Beyond, unpublished tabulations from 1980 senior cohort.

Notes: Income groups are divided into thirds based on the entire HS&B sample.
Some sample sizes used for these calculations may be insufficient for meaningful comparisons on percentages shown.
Tests of significance have not been performed.
Totals on each table may differ from those on other tables as the result of slight differences in the treatment of missing data.

within this group, white students attend college in slightly greater proportions than black students.

After adjusting for achievement and income, roughly similar patterns can also be seen for the four regions shown in Table 7. It is important to note, however, that for this degree of disaggregation, sample sizes may be very small--therefore, caution should be exercised in interpreting these numbers.

State Level Data

The HS&B survey provides information at the national and regional levels, but some data on black and white achievement are also available from several states (especially good data re readily available from southern states). We present data in Table 8 derived from the National Assessment of Educational Progress (NAEP) testing project of the Southern Regional Education Board (SREB); from reports of Scholastic Aptitude Test (SAT) scores; and from information obtained from several of the states.[9] For the states shown, the ratio of black-to-white academic achievement by all measures usually ranges between 0.74 and 0.95, which indicates that there is potential for improvement in black academic achievement relative to white achievement at the elementary and secondary levels. In one state where reading scores were available for the 1984-85 and 1986 tests--Florida--the black-to-white ratio did indeed improve slightly between the two periods.

Table 8: Average Proficiency Scores on Statewide Achievement Tests of Black and White High School Students for Selected States Where Such Scores Are Available

STATE AND TEST	All Students	White	Black	Ratio, Black-to-White Scores
Arkansas				
1986 SREB/ NAEP 11th-grade reading proficiency * (Norms: Nation, 289.1; White, 295.8; Black, 266.6)	291.9	299.1	263.2	0.88
Delaware				
11th-grade, CTBS (National Norm-50), 1984-85 **	57.0	NA	NA	NA
1985-86 SAT combined score (National Norm-906) ****	917	NA	NA	NA
Florida				
State Assessment Practice SSAT-II, March, 1986, Percent passing, grade 10 in: **				
Communications	89.0	94.0	76.0	0.81
Mathematics	83.0	88.0	65.0	0.74
1986 SREB/ NAEP 11th-grade reading proficiency * (Norms: Nation, 289.1; White, 295.8; Black, 266.6)	287.4	296.6	263.7	0.89
1986 SREB/ NAEP 11th-grade writing proficiency * (Norms: Nation, 2.13; White, 2.21; Black, 1.85)	2.07	2.17	1.83	0.84
1984-85 NAEP 11th-grade reading proficiency ***	292.1	299.9	267.0	0.89
1985-86 SAT combined score (National Norm-906) ****	895	NA	NA	NA
Georgia				
High School HSY, Mean scores, Fall, 1985 **				
Mean reading	328.0	334.0	314.0	0.93
Mean mathematics	319.0	325.0	307.0	0.94
1985-86 SAT combined score (National Norm-906) ****	842	NA	NA	NA
Louisiana				
1986 SREB/ NAEP 11th-grade reading proficiency * (Norms: Nation, 289.1; White, 295.8; Black, 266.6)	284.2	296.4	266.9	0.90
1986 SREB/ NAEP 11th-grade writing proficiency * (Norms: Nation, 2.13; White, 2.21; Black, 1.85)	1.99	2.13	1.88	0.85
North Carolina				
1986 SREB/ NAEP 11th grade writing proficiency * (Norms: Nation, 2.13; White, 2.21; Black, 1.85)	2.07	2.14	1.88	0.88
South Carolina				
1986 SREB/ NAEP 11th-grade reading proficiency * (Norms: Nation, 289.1; White, 295.8; Black, 266.6)	288.5	299.4	266.1	0.89
1986 SREB/ NAEP 11th-grade writing proficiency * (Norms: Nation, 2.13; White, 2.21; Black, 1.85)	2.07	2.19	1.88	0.86
11th-grade, CTBS-U, Battery, 1985-86, (national Norm-50) **	51.3	NA	NA	NA
1985-86 SAT combined score (National Norm-906) ****	826	NA	NA	NA
Tennessee				
1986 SREB/ NAEP 11th grade writing proficiency * (Norms: Nation, 2.13; White, 2.21; Black, 1.85)	2.11	2.21	1.84	0.83
1984-85 NAEP 11th-grade reading proficiency **	291.2	297.1	269.3	0.91
Texas				
Minimum Skills Assessment, 11th-grade, 1985, Percentage Mastering:				
Language Arts **	91.0	96.0	81.0	0.84
Mathematics **	88.0	94.0	72.0	0.77
1985-86 SAT combined score (National Norm-906) ****	877	NA	NA	NA
Virginia				
Minimum Competency Test, Spring, 1986, **				
Percentage passing, 10th-grade, Overall Scores	96.3	97.7	92.2	0.94
1986 SREB/ NAEP 11th-grade writing proficiency * (Norms: Nation, 2.13; White, 2.21; Black, 1.85)	2.14	2.20	1.90	0.86
1984-85 NAEP 11th-grade reading proficiency ***	298.4	305.7	273.7	0.90
1985-86 SAT combined score (National Norm-906) ****	900	NA	NA	NA
West Virginia				
1986 SREB/ NAEP 11th-grade reading proficiency * (Norms: Nation, 289.1; White, 295.8; Black, 266.6)	287.9	289.5	270.3	0.93
1986 SREB/ NAEP 11th-grade writing proficiency * (Norms: Nation, 2.13; White, 2.21; Black, 1.85)	2.16	2.17	2.01	0.93
11th-grade, CTBS (National Norm-50), 1984-85 **	54.0	NA	NA	NA

* Southern Regional Educational Board (SREB), Measuring Student Achievement: Comparable Test Results for Participating SREB States, The Region and The Nation, (Atlanta, Ga.: SREB, 1986)

** State data.

*** SREB, Measuring Student Achievement, 1985.

**** The College Board, 1986.

NA = Not Available

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One further indication of relative achievement among potential college students--particularly those comparing the nation and the South--can be seen from data on the proportion of 11th graders reading at the level seen as necessary to do college work (termed "adept" by NAEP) 1984-85 (Table 9). For the nation as a whole, 19.1 percent of blacks read at the "adept" level compared to 46.6 percent of whites, for a black-to-white ratio of 0.41. The black-to-white ratio in proportions reading at the "adept" level does vary across states; for the five southern states reporting such scores, the overall ratio is 0.35, but it ranges from 0.27 to 0.57.

Table 9. Percentage of Black and White 11th Graders Reading At "Adept" Level, for the Nation and Five States

	Percentage Reading At Adept Level		Ratio of Black-to-White Scores
	Black	White	
NATION (Total)	19.1	46.6	0.41
Arkansas	13.9	47.6	0.29
Florida	17.6	46.1	0.38
Louisiana	13.5	45.6	0.30
South Carolina	12.9	48.4	0.27
West Virginia	22.2	38.8	0.57
Five State Average	16.0	45.3	0.35

Source: NAEP, Measuring Student Achievement, 1986.

NOTES

1. See American Council on Education (ACE), Minorities In Higher Education, 1986; American Association of Collegiate Registrars and Admission Officers et al., Demographics, Standards, and Equity: Challenges in College Admissions, 1986; and the College Board, Equality and Excellence: The Educational Status of Black Americans, 1985.

2. This paper focuses on the actual college enrollment patterns of students within certain broad categories of economic status, academic achievement, and geographic location. The array of factors shown in the literature to influence college application, admission, enrollment, and completion are not analyzed here. See Jackson and Weathersby, 1975, and McPherson, 1978, for good reviews of this literature.

3. Alternative measures of black and white college enrollment are largely determined by the available data from which they are derived. Most of the trend data on total enrollment in institutions of higher education and on the demographic and economic characteristics of students in such institutions, are derived from two sources: the Opening Fall Enrollments section of the Higher Education General Information Survey (HEGIS) taken annually by the Center for Education Statistics (CES) in the U.S. Department of Education, and the periodic Current Population Surveys (CPSs) of the U.S. Bureau of the Census, which build on decennial census tabulations.

   These sources differ in several important respects, yielding sometimes inconsistent information (see Preer, 1981, for additional discussion of these data sources). HEGIS is a universe survey of all institutions of higher education, but the only information collected in the HEGIS survey concerning the demographics of the college population is a distribution of enrollment by race or ethnicity (taken every two years). Because these data are reported by each institution, information can be disaggregated by institution and level of instruction for each reported racial or ethnic group. The Office of Civil Rights has used HEGIS surveys to fulfill its reporting requirements in recent years. The CPS enrollment information, in contrast, is based on annual surveys of a sample of approximately 50,000 households. The CPS, which compiles self-reported enrollment data, is the only source available to break out enrollment by age for each racial or ethnic group. Thus, although researchers sometimes speculate concerning the age and racial distributions of students attending college by transposing information from

both these sources (see Gerald, 1985), these data series should be considered somewhat disjointed.

4. Caution should be used in analyzing year-to-year variations in these CPS data. Some variations are larger than expected, indicating that there may be some reporting errors in the data. However, the Census Bureau, in an analysis of these data, did not find a decline in black enrollment at any point over the last 10 year period. (U.S. Department of Commerce, Bureau of the Census, School Enrollment--Social and Economic Characteristics of Students: October 1985, Advance Report.)

5. For example, ability or achievement and income have been shown to be important determinants affecting enrollment (see Manski and Wise, 1983; Thomas, 1980; Christensen, Melder, and Weisbrod, 1975; Sewell and Hauser, 1972; Tierney, 1980; Radner and Miller, 1975; and Lehr and Newton, 1978). For additional information, see also Corman and Davidson, 1982; McPherson, 1978; Davis and Kirschner, 1977; Ramist, 1981; and Allen, 1981.

6. The High School and Beyond Survey (HS&B) obtained base-year information on approximately 25,000 high school seniors in Spring 1980. Follow-up information concerning these seniors was obtained in 1982 and 1984. Our analysis of the postsecondary enrollments of the 1980 seniors tabulates information from these two follow-up surveys; all the seniors surveyed graduated as expected. Postsecondary attendance is defined to exclude students attending vocational-technical schools for the purpose of this report.

7. Unweighted sample sizes are available upon request.

8. Percentages for total enrollment may differ slightly among tables, since different degrees of missing data exist for each of the various levels of disaggregation tabulated.

9. According to a recent report (Southern Regional Education Board, 1986), "The fact is that today we do not have current and reliable measures of how student achievement in a State compares to national or regional results or of how students are doing compared to students in other States. The same national tests are used by only a few States; averages are set only about once every decade; tests are often given at different grade levels, at different times of the year, under different conditions; and scores are reported in different ways" (p. iii). According to another recent analysis (American Council on Education, 1986), there has been a marked decline in the willingness or ability of states to report college

enrollment information by racial or ethnic categories. In addition, fewer and fewer institutions are responding to the race/ethnicity questions posed in the HEGIS survey.

APPENDIX A

Supplementary Tables

This appendix provides supplementary data concerning black and white college enrollment patterns. Tables A-1 and A-2 present enrollment data disaggregated by type of institution and level of study. Table A-1 shows that the black-to-white ratio of students enrolled in public institutions is 0.93, compared with 0.74 for private institutions. Table A-2 shows the black-to-white ratio of students in two-year institutions as 1.05, compared with 0.82 for four-year institutions.

Table A-3 shows average reading scores for black and white high school graduates in each of the three income groups nationwide and for each region.

Table A-1. Percentage of Black and White 1980 High School Graduates Who Had Ever Entered Postsecondary Education in the Four-Year Period After High School By Region and Type of Institution

	All Institutions		All Public		All Private	
	Percentage Enrolled	Black-to-White Ratio	Percentage Enrolled	Black-to-White Ratio	Percentage Enrolled	Black-to-White Ratio
NATIONAL (Total)	53.59	NA	41.82	NA	11.77	NA
White	55.36	NA	42.46	NA	12.90	NA
Black	49.21	0.89	39.64	0.93	9.57	0.74
NORTHEAST (Total)	56.07	NA	33.39	NA	22.69	NA
White	57.01	NA	33.44	NA	23.58	NA
Black	58.37	1.02	41.10	1.23	17.28	0.73
SOUTH (Total)	48.86	NA	41.50	NA	7.36	NA
White	51.06	NA	44.88	NA	6.17	NA
Black	43.06	0.81	36.13	0.81	6.93	0.85
CENTRAL (Total)	54.21	NA	43.60	NA	10.61	NA
White	55.47	NA	44.58	NA	10.89	NA
Black	54.80	0.99	43.96	0.99	10.84	1.00
WEST (Total)	57.43	NA	50.54	NA	6.89	NA
White	56.07	NA	48.11	NA	7.96	NA
Black	61.54	1.13	55.04	1.14	6.49	1.07

Source: U.S. Department of Education, Center for Education Statistics, High School and Beyond, unpublished tabulations from 1980 senior cohort.

Note: Some sample sizes used for these calculations may be insufficient for meaningful comparisons on percentages shown.
Tests of significance have not been performed.
Totals on each table may differ from those on other tables as the result of slight differences in the treatment of missing data.
NA = Not Applicable

Table A-2. Percentage of Black and White 1980 High School Graduates Who Had Ever Entered Postsecondary Education in the Four-Year Period After High School By Region, Level, and Type of Institution

		Four Year Institutions						Two Year Institutions					
		All Four Year		Public		Private		All Two Year		Public		Private	
		Percentage Enrolled	Black-to-White Ratio	Percentage Enrolled	Black-to-White Ratio	Percentage Enrolled	Black-to-White Ratio	Percentage Enrolled	Black-to-White Ratio	Percentage Enrolled	Black-to-White Ratio	Percentage Enrolled	Black-to-White Ratio
NATIONAL	(Total)	35.84	NA	24.82	NA	11.02	NA	17.75	NA	17.00	NA	0.75	NA
White		38.40	NA	26.27	NA	12.12	NA	16.97	NA	16.19	NA	0.78	NA
Black		31.87	0.83	22.73	0.87	9.14	0.72	17.75	1.05	16.91	1.04	0.83	1.06
NORTHEAST	(Total)	41.87	NA	28.69	NA	21.28	NA	16.10	NA	12.70	NA	1.41	NA
White		43.16	NA	20.97	NA	22.19	NA	13.83	NA	12.46	NA	1.39	NA
Black		30.97	0.90	33.77	1.09	16.20	0.73	19.48	1.40	18.41	1.48	0.99	0.71
SOUTH	(Total)	32.67	NA	26.19	NA	6.48	NA	16.19	NA	15.31	NA	0.88	NA
White		34.56	NA	29.37	NA	7.19	NA	16.58	NA	15.51	NA	0.99	NA
Black		28.96	0.79	23.87	0.78	6.09	0.85	16.09	0.85	15.26	0.85	0.84	0.85
CENTRAL	(Total)	39.67	NA	29.23	NA	10.44	NA	16.56	NA	16.37	NA	0.19	NA
White		41.23	NA	30.51	NA	10.73	NA	16.24	NA	16.07	NA	0.17	NA
Black		35.25	0.85	24.94	0.82	10.32	0.96	19.55	1.37	19.02	1.35	0.53	3.12
WEST	(Total)	37.02	NA	30.68	NA	6.34	NA	30.41	NA	29.86	NA	0.54	NA
White		38.52	NA	31.22	NA	7.30	NA	27.56	NA	26.89	NA	0.67	NA
Black		33.35	0.82	15.95	0.75	7.39	1.01	40.19	1.46	39.09	1.45	1.10	1.64

Source: U.S. Department of Education, Center for Education Statistics, High School and Beyond, unpublished tabulations from 1980 senior cohort.

Note: Some sample sizes used for these calculations may be insufficient for meaningful comparisons on percentages shown.
Tests of significance have not been performed.
Totals on each table may differ from those on other tables as the result of slight differences in the treatment of missing data.
NA = Not Applicable

Table A-3. Mean Reading Scores for Black and White 1980 High School Graduates, by Family Income and Region,

	Lowest Third	Ratio of Black-to-White Scores	Middle Third	Ratio of Black-to-White Scores	Highest Third	Ratio of Black-to-White Scores
NATIONAL (Total)	50.66	NA	52.26	NA	55.14	NA
White	55.36	NA	53.53	NA	55.76	NA
Black	46.28	0.84	46.79	0.87	49.89	0.89
NORTHEAST (Total)	52.69	NA	52.82	NA	56.94	NA
White	54.19	NA	53.55	NA	57.49	NA
Black	48.41	0.89	48.50	0.91	52.08	0.91
SOUTH (Total)	48.92	NA	50.48	NA	53.28	NA
White	52.93	NA	52.48	NA	54.04	NA
Black	45.30	0.86	46.66	0.89	49.02	0.91
CENTRAL (Total)	51.80	NA	54.05	NA	55.52	NA
White	52.44	NA	54.78	NA	55.93	NA
Black	49.68	0.95	47.21	0.86	50.07	0.90
WEST (Total)	51.35	NA	51.45	NA	54.67	NA
White	55.05	NA	52.55	NA	55.28	NA
Black	46.51	0.84	41.73	0.79	47.07	0.85

Source: U.S. Department of Education, Center for Education Statistics, High School and Beyond, unpublished tabulations from 1980 senior cohort.

Note: NA = Not Applicable

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